

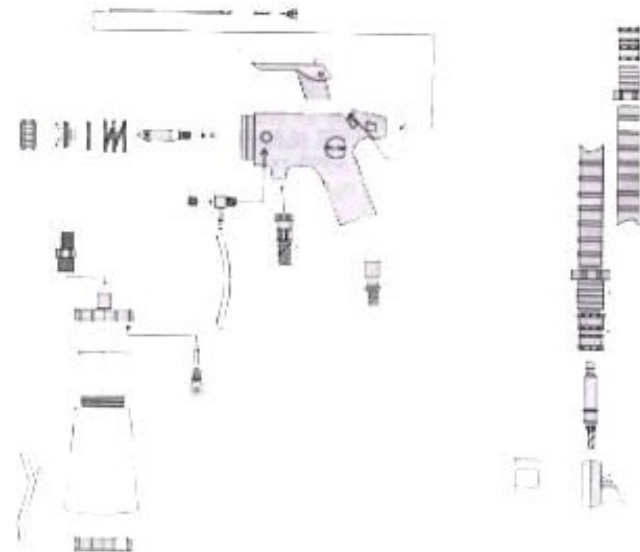
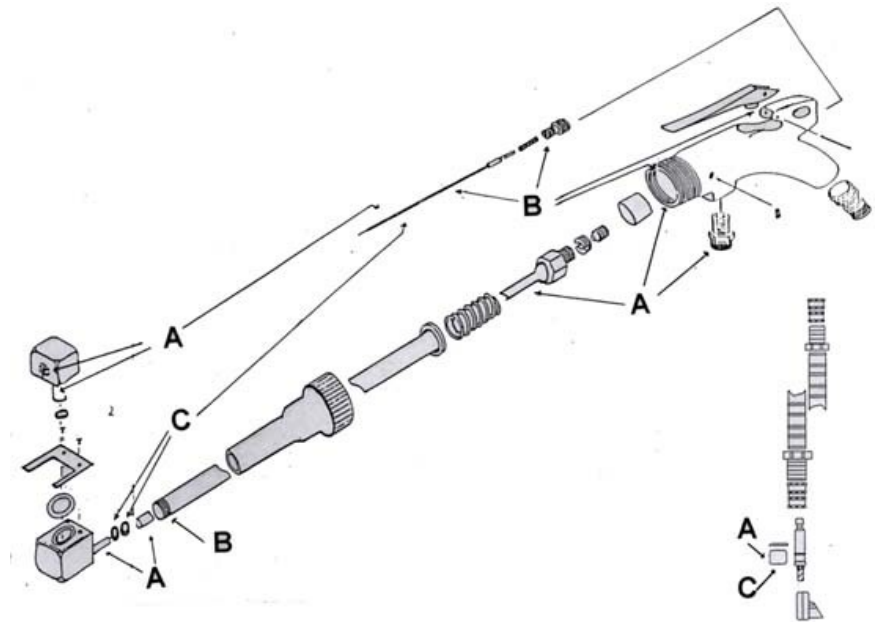
## General Information

- High volume low pressure (HVLP) paint spray systems are replacing airless spray systems and manual hand painting.
- Provide an increased paint transfer efficiency of more than 40% compared to the high pressure airless systems.
- Volatile organic compound emissions are reduced.
- Decrease labor hours and paint waste resulting from manual painting.
- Post painting waste and space preparation wastes are reduced through the use of HVLP spray systems.
- TM Number S9593-CS-CAT-010
- APL: 419990367
- NSN: 4940-01-457-1929

# Operational Information

## The HVLP Spray System Consists of:

- A diaphragm pump suitable for adaptation to a standard Navy five-gallon pail of paint. It can also be attached to a solvent pail and used as a hose and tool cleaner.
- An HVLP spray gun with inductor to ensure no more than 10 psi at the nozzle outlet. The gun also easily disassembles or attaches to a standard gun washer.
- A two quart spray pot is provided for smaller jobs that requires less paint.
- Two spray heads are provided to accommodate various patterns of application: one is a rotating precision head for detailing operations and the other provides a rotating fan head for bulkhead (flat surface) spraying.





## The HVLP Spray System is easy to Operate

- Lubricate all threaded connections and the needle (where it passes through the needle packings) with non-silicone grease.
- Use nozzles for painting the overhead or on top of pipes.
- Paint has to be well mixed. Use P2 Afloat paint mixer. Strain paint to remove impurities.

- Attach the fluid hose from the pressure pot or pump to the fluid fitting on the gun and tighten.
- Attach the inductor assembly to the male quick disconnect at the base of the gun handle.
- Ensure paint is properly mixed before pouring into the pot or attaching the pump to a 5-gallon pail.
- Attach the pot or the pail pump to a low pressure air supply of at least 80 SCFM and 90 psi.
- Apply supply air to the gun via the inductor assembly or to the pail pump.
- Open fluid flow valve and depress gun trigger to allow fluid flow.
- Adjust nozzle stream and direction as required by spray application surface.
- Clean system either by attaching to a standard spray gun washer located in the ship's paint locker or by placing a comb

## Safety Information



- The HVLP guns are much safer than conventional high pressure spray systems due to the inability to apply more than 10 psi at the nozzle head. Conventional systems aboard Navy ships typically apply 3600 psi of paint at the nozzle head, presenting the hazard of accidentally infusing oneself or another sailor with toxic paint.
- The HVLP system has an inductor to ensure compliance with EPA regulations defining HVLP spray systems. This precludes the ability of the operator to increase the pressure at the head by turning up the air regulator.
- Operators must wear PPE required under standard Navy requirements for paint spray operations.
- If using a 1-quart cup, first remove the air pressure tube.

# Paint Brush Holders

## General Information

- Storing the paintbrushes in the Paint Brush Holder allows for three times the normal brush life by providing a way to store paintbrushes in mineral spirits.
- The encasing is specifically designed to resist corrosion and will not be affected by paint-cleaning solvents used onboard Navy ships.
- TM Number S9592-CS-CAT-010
- NSN: 5140-01-465-2324



## **Operational Information**

- Clean/wipe the majority of paint off the brush.
- Place the paintbrush inside the holder's rack and add mineral spirits so that the bristles are covered.
- Solvents should be replaced at least monthly, or as required.
- Do not reuse brushes used with epoxy paints.
- Use one box for brushes used for the same paint color.

## **Safety Information**

- Paint Brush Holder operators are required to wear safety goggles and gloves.

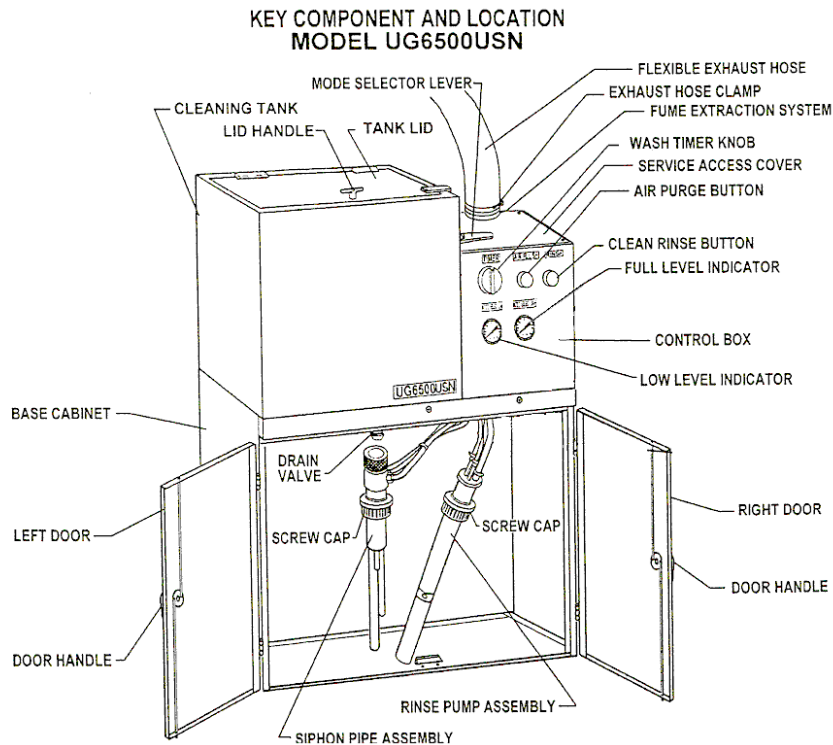


## General Information

- The Paint Gun Cleaning Station is an automated, closed-loop system that flushes and cleans HVLP paint guns and accessories, then recirculates and reuses the solvent.
- It uses pneumatic power to move paint-cleaning solvent into the station to clean these guns.
- Minimizes the exposure of personnel to hazardous chemicals while reducing spent solvent and rag waste streams.
- Reduces the time spent cleaning paint guns or other paint application tools.
- Automatic fume extraction when lid is opened.
- APL: 41A000019
- TM# ST200-DE-MMC-010



## Operational Information



- The operator must initially fill the recycle pail with 2.5 gallons of solvent and the rinse pail with 5 gallons of solvent.
- Remove as much paint from paint pot as possible before putting into the gun washer. Clean HVLP guns and accessories immediately after use. The washer will not clean surfaces with hardened paint on them.
- After preparing the HVLP guns or pots for washing, the operator then locks the guns or pots in place and shuts the lid.
- The operator should adjust the air pressure to between 75 and 90 psi, turn the machine on, and, in 30 to 60 seconds, the guns should be clean.
- Select mode (hose or gun cleaning).
- Install fitting/nozzle/accessory for item being cleaned.
- Start wash timer for approx. 1.5 minutes.
- Once generally clean, press and hold air purge for 10 seconds to clean the manifold of the contaminated solvent.
- Press level check button for recirculated solvent pail.
- Press and hold rinse button for 10 seconds. Wait 30 seconds if a second rinse is needed.
- Spray guns: use trigger lock to hold it in place.



## **Safety Information**

- Operators are required to wear safety goggles, gloves, and apron.
- Dispose of used solvent in accordance with OPNAVINST.
- When cleaning hoses, ensure the hose is compatible with the solvent being used.
- Excessive use of air flushing and clean rinse cycles will cause loss of solvent through atomization.
- Do not keep level check button depressed more than 3 to 5 seconds. Excessive use of level check button will cause loss of solvent through atomization.
- When performing maintenance, ensure air pressure is relieved.

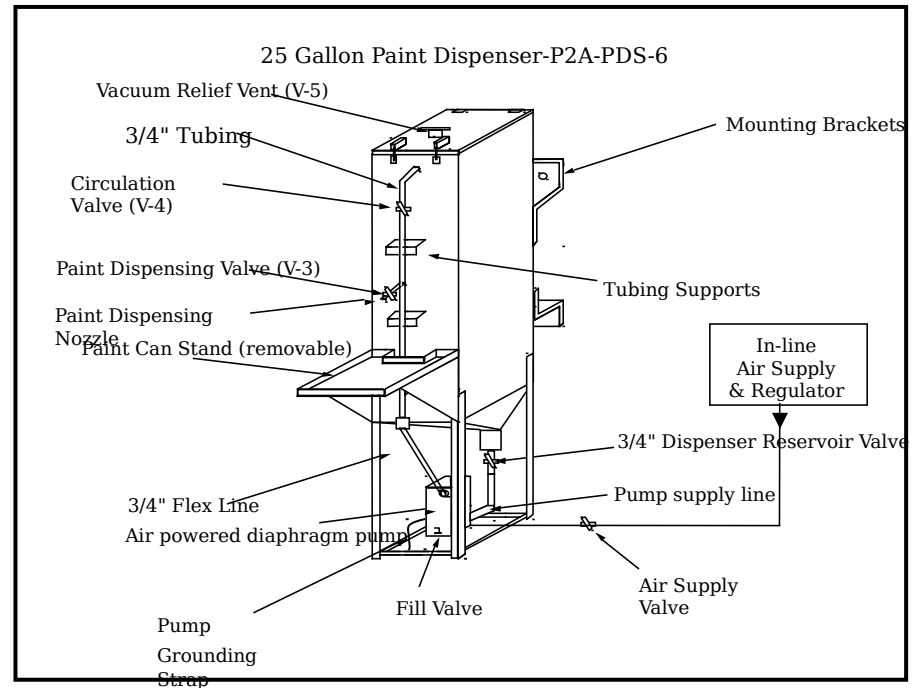
## General Information

- The U.S. Navy-developed Paint Dispensers hold 25-gallons of Navy-standard paints in airtight, stainless steel containers.
- The Dispensers can store paint (single component or one element of dual-component paints) without curing; maintain the paint homogeneity via a circulation system; and dispense paint in variable quantities.
- The Dispensers are made entirely from stainless steel 304, unless noted otherwise, and pneumatically-powered by a diaphragm pump.
- Other features include a removable strainer, a removable paint can stand tray, and a removable lid. The pump allows for up to four gallons per minute to be dispensed or circulated.
- Reduces the amount of paint needed to be purchased, and reduces the costs associated with
- The system eliminates most paint spillage, reduces waste due to spillage and over-issuing, while improving paint performance due to mixing and more accurate ratio measuring of two-component paints.
- TM Number SG200-DA-MMC-010
- APL: 419990364



## Operational Information

- Air Requirements: 5 scfm @ 60-80 psi (when mixing or dispensing paint)
- Thoroughly mix paint before adding to paint dispenser. Add 5 gallon cans via the tubing and fill valve.
- Circulate the paint through the dispenser for a minimum of 30 minutes per day to ensure homogeneity of the product, smooth dispensing, and prohibit skinning and drying of the paint.
- The dispensers operate optimally when maintained with between 10 to 20 gallons of paint. Do not let level get below screen
- To dispense paint:
  - Open the air supply valve.
  - Slowly open the paint dispensing valve.
  - Throttle circulation valve as necessary for proper paint flow.
  - When finished dispensing paint, close paint dispensing valve.
  - Open circulation valve.
  - Close air supply valve.



- Screen has to be properly seated
- Clean dispensing valves periodically
- Do not shut pump off by closing recirculation valve, close air supply valve

## Safety Information

- The personnel protective equipment required when operating the system is limited to what is required during general paint locker operation.
- The dispenser pump must circulate the paint 30 minutes each day. Failure to do so will cause paint to harden in the pump and the dispenser will become inoperative.
- Do not let pumps run dry.
- Never combine two-component paints into one dispenser.
- Do not return unused mixed two-component paint into the dispensers.
- Check moisture trap on air line and drain off accumulated water.
- Keep lid gasket free of paint. Lid will stick shut if gasket is coated with paint.

## Application Information

<b>Amount of paint issued</b>	<b>Approximate surface area covered with one layer of 6 mil wet film thickness</b>
1 Gallon	267 ft <sup>2</sup>
1 Quart	67 ft <sup>2</sup>
1 Pint	33 ft <sup>2</sup>

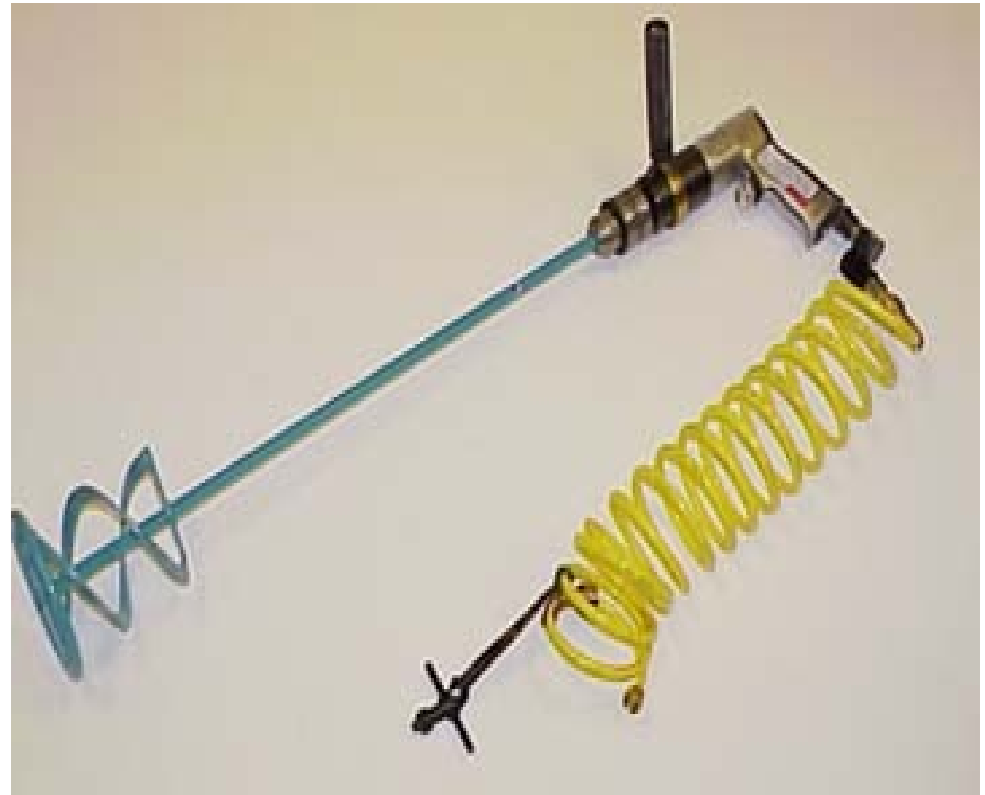
# Pneumatic Drill Mixer

## General Information

- The Pneumatic Drill mixer replaces electric and hand paint mixers.
- The mixer is designed to thoroughly mix 5-gallon paint cans, thus increasing the life expectancy and performance of the paint.

## Operational Information

- Mixer can be removed from the drill and cleaned in the paint gun cleaning station.
- Can provide a good initial mix to the paint before it is added to the paint dispensers.
- Check oiler on airline for paint mixer
- Mix paint well before adding to dispenser





# Points of Contact

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